

Aircraft Ground Power Unit Specifications

- 140 kVA, 3 phase, 4 wire, 115 / 200 VAC, continuous
- Meets or exceeds MIL-STD-704E Electrical Power Quality Requirements
- Transient voltage recovery time within $\pm 1\%$ in 100 milliseconds (no load to rated load)
- Within $\pm 20\%$ voltage deviation upon application/removal of 100% load rating
- does not exceed 0.5% of steady state voltage
- Phase voltage displacement with balanced load: 120 ± 1.5
- Phase voltage balance (with unbalanced load) does not exceed 4% with 1/3 rated current on any single phase with other two phases disconnected
- Crest factor: 1.404 ± 0.07
- Individual Harmonic Distortion: $< 2\%$ of the fundamental (RMS) voltage
- Total Harmonic Distortion: $< 3\%$ of the fundamental (RMS) voltage
- Operation temperature: -25°F to $+125^{\circ}\text{F}$ / -31°C to $+52^{\circ}\text{C}$
- Relative humidity 0-100% non-condensing
- No altitude de-rating required $\leq 10,000'$, when running in normal operating range

Overload

- 125% rated load for 5 minutes, 150% for 30 seconds
- individual outputs: 324 amps, 5 minutes

Frequency

- Frequency Regulation: $\pm 1\%$ steady state
- Transient recovery: to within $\pm 5\text{Hz}$ in < 2 seconds per ARP 5015A
- Modulation: $< 0.25\%$ (1Hz)

Regulation

- Voltage Regulation: $\pm 1\%$ no load to full load
- Voltage adjust: ± 15 volts
- IHD (individual harmonic content): $< 2\%$
- 3 phase average sensing, built-in Automatic line drop compensation, up to 5%
- Line Drop compensation: Automatic up to 5%

Controls

- Overvoltage: instantaneous disconnect of load at 180 volts L-N, with inverse time delay down to 126 volts in 2 seconds
- Under voltage: disconnects output below 100 volts L-N in 7 seconds
- Over frequency: disconnects output above 420Hz in 5 seconds
- Under frequency: disconnects output below 370Hz in 7 seconds

Finish

- Anti-corrosive, weather resistance, with strong resistance to chemical agents.

Engine Specs

- Diesel (Cummins QSB 6.7 CARB Tier 3 Compliant)
- Must be both Environmental Protection Agency (EPA) and California EPA Air Resources Board Certified and conform to all applicable California emission regulations; (EPA Tier 3 / CARB Tier 3)
- 2400 RPM, 240 Horsepower
- Electronically controlled,
- turbo charged
- 4-stroke, 6 cylinder
- charge air cooled
- 12 VDC battery system
- Low oil pressure shutdown
- Intake air restriction indication
- Semi-automatic pre-heater for cold weather starts
- Must be able to operate with JP-8 Jet Fuel

Trailer Specs

- Tire size: 20.5 x 8.00 - 10
- Ground clearance: 9"
- Brakes: Tow bar activated, drum type

Cable Specs

AC 30' 4-2/0 W 12/2